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Patentamt

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Département à  
La Haye  
Division de la  
recherche

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ALLEMAGNE

Eingang bei ZPL

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Term.  
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Datum/Date

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Zeichen/Ref./Réf.

113 312

Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°.

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Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire

ALCATEL

## COMMUNICATION

The European Patent Office herewith transmits

- ☒ the European search report
- ☐ the declaration under Rule 45 EPC
- ☐ the partial European search report under Rule 45 EPC
- ☐ the supplementary European search report concerning the international application under Article 157(2) EPC relating to the above-mentioned European patent application. Copies of the documents cited in the search report are enclosed.

The following specifications given by the applicant have been approved by the Search Division :

☒ Abstract

☐ Title

☒ Figure

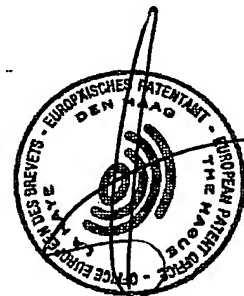
- ☐ The abstract was modified by the Search Division and the definitive text is attached to this communication.
- ☐ The following figure will be published with the abstract, since the Search Division considers that it better characterises the invention than the one indicated by the applicant.

Figure:

- ☐ Additional copy(copies) of the documents cited in the European search report.

## REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.



EPO Form 1507 02.93



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	WO 01 73981 A (GEIGER HARALD ; MOHS GEORG (DE); SIEMENS AG (DE); FUERST CORNELIUS) 4 October 2001 (2001-10-04)	1-3	H04B10/155 H04L27/20
Y	* abstract * * figure 2 *	6,7	
Y	--- EP 0 643 497 A (SIEMENS AG ; AT & T CORP (US)) 15 March 1995 (1995-03-15) * column 7, line 11 - line 16 * * column 9, line 4 - line 18 * * figure 2B *	6,7	
A	--- "An Electro-Optical Frequency Shifter. FREQUENCY OF A LASER BEAM WOULD BE SHIFTED UP OR DOWN BY AS MUCH AS SEVERAL GIGAHERTZ" NASA TECH BRIEFS, SPRINGFIELD, VA, US, September 2000 (2000-09), pages 1-2, XP002207638 * the whole document *	1-3,6,7	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			H04B H04L
<del>The present search report has been drawn up for all claims</del>			
Place of search THE HAGUE		Date of completion of the search 19 March 2003	Examiner Reville, L
<div>CATEGORY OF CITED DOCUMENTS</div> <div>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</div> <div>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- &amp; : member of the same patent family, corresponding document</div>			



### CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-3, 6, 7



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-3,6,7

To generate an optical signal using an NRZ signal

2. Claims: 4,5,8,9

To generate an optical MSK signal using a first bipolar RZ signal and a second RZ signal

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 02 36 0282

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

19-03-2003

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
W0 0173981	A	04-10-2001	W0	0173981 A1	04-10-2001
EP 0643497	A	15-03-1995	US	5400165 A	21-03-1995
			AU	682527 B2	09-10-1997
			AU	7280294 A	23-03-1995
			CA	2122381 A1	11-03-1995
			EP	0643497 A1	15-03-1995
			JP	7154327 A	16-06-1995